

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) Apparatus for forming a terminal on a battery, wherein the battery has a lid having a metal bush and a post connecting a group within the battery and located with its free end in the bush including:

[[a)] a fusing device for fusing the post to the bush to form an assembly,

[[b)] a [[mould]] mold having a cavity capable of receiving the assembly; ~~and for forming or finishing a terminal~~
~~means for characterised in that the mould cavity~~
~~extends above the intended height of the terminal to allow for~~
allowing overfilling of the [[mould]] mold above a predetermined
final fill level, and for controllably allowing contents of the
overfilled mold to flow out so that the contents reach the
~~cavity includes a constant height structure to define the~~
predetermined final fill level of the [[mould]] mold.

2. (currently amended) Apparatus as claimed in Claim 1, wherein the means for overfilling comprises: ~~further~~
~~including~~

a feed channel adjacent the mold; and

a pump for pumping molten material into the cavity

through the feed channel.

3. (currently amended) Apparatus as claimed in Claim [[1]] 2, wherein the means for overfilling further comprises:
~~wherein the molten material is introduced into the mould via the~~
a constant height structure defining the predetermined final fill level, via which the molten material can be introduced into the mold.

4. (original) Apparatus as claimed in Claim 3 wherein the constant height structure is in communication with an inlet/outlet channel.

5. (original) Apparatus as claimed in Claim 4 wherein the inlet/outlet channel includes a valve for determining the height of molten material in the inlet/outlet channel relative to the constant height structure.

6. (previously presented) Apparatus as claimed in claim 1 wherein the constant height structure is a weir.

7. (currently amended) Apparatus as claimed in Claim 6 wherein the weir is inclined downwardly in ~~the~~ a direction of outflow of the contents of the overfilled mold from the cavity.

8. (currently amended) Apparatus as claimed in claim 1 further including a displacement body for introduction into the [[mould]] mold cavity to ensure that any excess material flows out of the [[mould]] mold.

9. (previously presented) Apparatus as claimed in claim 1 wherein the fusing device is a heatable probe for

engaging and fusing the post and bush.

10. (original) Apparatus as claimed in Claim 9 wherein the tip of the probe is formed to engage the tip of the post.

11. (previously presented) Apparatus as claimed in Claim 9 wherein the probe has a dependent skirt at its tip for melting at least part of the inner periphery of the bush.

12. (currently amended) Apparatus as claimed in claim 8 ~~[[9]]~~ wherein the probe is mounted for movement into and out of the ~~[[mould]]~~ mold cavity.

13. (currently amended) Apparatus as claimed in Claim 12 ~~above dependent on Claim 8~~ wherein the probe constitutes the displacement body.

14. (currently amended) Apparatus as claimed in claim 9, further comprising ~~wherein the probe is heated by~~ at least one gas jet positioned to allow heating of the probe.

15. (currently amended) Apparatus as claimed in Claim 14 further including a control for increasing the strength of the gas jet when the probe is remote from the cavity after molding ~~moulding~~ to surface treat the tip of the terminal and/or to displace any flashings from the terminal.

16. (currently amended) Apparatus as claimed in claim 3 ~~[[1]]~~ wherein a part of the ~~[[mould]]~~ mold includes a thermal break adjacent between the constant height structure and the feed channel ~~the level of the lid of the box to retain heat at the base of the mould.~~

17. (currently amended) A method for forming a terminal on a battery wherein the battery has a lid having a metal bush and a post connected to a group within the battery and located with its free end in the bush comprising steps of:
wherein

providing a mold having an inlet/outlet;

fusing the post is initially fused to the bush; and
molding the terminal is moulded on the fused bush and post assembly in a the mold [[mould]] encircling the assembly by characterised in that the mould is initially overfilled
overfilling the mold above a bottom level of the inlet/outlet
with terminal forming material and subsequently allowing the
excess said terminal forming material is allowed to flow out of
the mold via the inlet/outlet [[mould]].

18. (currently amended) A method as claimed in Claim 17 wherein the post is fused to the bush whilst located in the mold [[mould]].

19. (currently amended) A method as claimed in Claim 18 wherein the post and bush are fused by engagement by a heated probe introduced into the cavity of the mold [[mould]].

20. (currently amended) A method as claimed in Claim 18 wherein the probe is withdrawn from the cavity during filling of the mold [[mould]] and subsequently dipped into the mold [[mould]] cavity to displace any remaining excess material.

21. (previously presented) A method as claimed in

claim 17 wherein a jet of hot gas is played on the surface of the terminal, after the excess material has flowed out, to remove any flashings.

22. (currently amended) A method as claimed in claim 17 wherein heat is retained in area of the assembly whilst the terminal solidifies by providing a thermal break near the inlet/outlet.

23. (currently amended) A method as claimed in claim 17, comprising a further step of reheating ~~wherein~~ the tip of the terminal ~~is re-heated~~ as solidification occurs.

24. (new) An apparatus for forming a terminal on a battery, wherein the battery has a lid having a metal bush and a post connecting a group within the battery and located with a free end of the post in the bush, comprising:

a fusing device for fusing the post to the bush to form an assembly;

a mold having a cavity receiving the assembly and for forming or finishing a terminal;

wherein the mould cavity is constructed and arranged so that the mold cavity extends above an-intended height of the terminal, so as to allow overfilling of the mold, the mold cavity further comprising a constant height structure, the constant height structure defining a predetermined final fill level of the mold.